The Role Of The Young Generation In Stunting Prevention To Create Superior Human Resources In Abang Village, Abang District, Karangasem Regency

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Abstract

Addressing and reducing the prevalence of stunting in Indonesia, supported by the reduction of stunting in various regions throughout the country, is a highly relevant program in achieving Indonesia's vision for 2045 as declared by the President of the Republic of Indonesia. In realizing this vision, the program to reduce the prevalence of stunting in Indonesia becomes highly relevant to achieve this overarching goal. Therefore, all elements of society, in accordance with their respective roles, can contribute to supporting the realization of Indonesia's advanced vision. Hence, studies regarding the condition of stunting in its various dimensions become very important and relevant. The purpose of this Community Engagement activity is to: 1) Analyze the knowledge, attitudes, and practices of young generations in stunting prevention in a rural village; 2) Enhance the role of young generations in stunting prevention in their village. The Community Engagement activity was conducted in Abang Village, Karangasem Regency. This regency was chosen because it has the highest prevalence of stunting among the regencies in Bali Province. The activity involved young people in the village, known as "Sekehe Teruna Teruni," as participants in the event, which provided Communication, Information, and Education (KIE) related to stunting prevention. There were three resource persons for this activity, including an academic, a healthcare professional, and a Family Planning field educator. After the socialization, an evaluation was conducted on the participants, and the results were analyzed using descriptive statistics. The analysis revealed the following: 1) About 70% of the participants had heard of the stunting phenomenon, while the remaining 30% had not. Approximately 96% of the participants increased their knowledge about stunting after the KIE, with only about 4% not experiencing an increase in their knowledge. This increase in knowledge influenced their attitudes, making them more willing to participate in stunting prevention through family planning. 2) Data analysis indicated that all participants, 100%, expressed their intent to plan the number of children they would have when they get married according to their economic and other capabilities. Generasi muda berperan penting dalam penurunan/ pencegahan stunting karena generasi muda ini yang akan melahirkan anak-anak nantinya sehingga dapat dijaga kualitas anak yang dilahirkan sehingga stunting dapat dicegah/ diturunkan dengan peran dari generasi muda tersebut.

Keywords: Stunting, young generation, family planning and human resources quality.

I. INTRODUCTION

In addressing stunting, the term "convergence" is considered the appropriate method. Convergence is an approach to delivering interventions in a coordinated, integrated, and collaborative manner to prevent stunting among priority targets (Vice President's Secretariat, 2020). This concept of convergence makes it clear that addressing stunting is the responsibility of various parties according to their respective roles, and optimal outcomes will not be achieved if actions are taken in isolation and are not integrated or coordinated. Stunting is defined as a failure to thrive due to malnutrition in the first one thousand days of a child's life, resulting in the child's height being below the standards set by the World Health Organization (WHO). Stunting is a significant public health problem and a primary government program to address it continuously. Nutritional deficiencies in an infant during the first one thousand days of life are the cause of stunting. The "Golden Age" is a critical period for a child's development, which will impact their future quality of life. During this period, nutrition is crucial to ensure that the future young generation has high-quality potential to compete and enhance the nation's productivity. Chronic malnutrition in toddlers will limit a child's growth potential due to inadequate nutrition intake. Stunting has a negative impact on the quality of life, such as decreased intellectual capacity, vulnerability to diseases, decreased productivity, and even poverty.

Similar to a vicious cycle of poverty, low population quality leads to low productivity, resulting in low income, which affects nutrition intake, and the cycle continues to affect population quality. Malnutrition in toddlers remains a public health issue in Indonesia. This causes a high prevalence of stunting in Indonesia. The prevalence of stunting in Bali is relatively low compared to the National Stunting Prevalence,

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with a national average of 24.4% in 2021, while Bali's prevalence is 10.9% in the same year (Indonesian Nutrition Status Study). However, looking at individual regencies in Bali reveals significant disparities. As shown in Table 1, Karangasem Regency has the highest stunting prevalence in Bali, while Gianyar Regency has the lowest. A stunting rate of 22.9% rounded to 23 means that out of 100 children in Karangasem Regency, 23 of them are stunted. Stunting incidence is also caused by parents' knowledge of the negative impacts of stunting. Data also indicates that the average level of education for the population in Karangasem Regency is at the elementary school level. This, of course, affects child-rearing practices and the social and economic conditions of the population in Karangasem, which are relatively low (Bali Provincial Statistics Agency, 2020). If macro data related to social and economic conditions in Karangasem Regency are compared with other regencies and cities, it is evident that Karangasem Regency has relatively low average education and per capita income. This situation is suspected to be one of the reasons for the high incidence of stunting in Karangasem Regency compared to other regencies and cities.

**Tabel 1. Prevalence of Stunted Toddlers in Bali Province in 2021**

![Graph showing prevalence of stunted toddlers in Bali](https://ijcsnet.id)

Source: Indonesian Nutrition Status Study (SSGI) 2021

The data also shows that the per capita income in Karangasem Regency is the lowest among the regencies and cities in Bali Province (Bali Provincial Statistics Agency, 2022). Low income undoubtedly affects how parents educate and care for the growth and development of their children. This is reinforced by Margareta, 2015, who states that low income and low education levels affect parental caregiving practices towards children by 44.5%. This should be a special concern for all of us, considering that one of the pillars in the five pillars of the Grand Design for Population Development in Indonesia is the improvement of the population's quality. The Grand Design for Population Development in Indonesia is regulated by Presidential Regulation Number 153 of 2014. The presidential regulation stipulates five pillars for population development: population quantity control, population quality improvement, population distribution arrangement, family development quality, and population data and information organization and administration, which must be part of the content of the Grand Design for Population Development (BKKBN, 2020). Under the population quantity control pillar, the outputs used to assess its success include the Total Fertility Rate (TFR), Maternal Mortality Rate (MMR), and Infant Mortality Rate (IMR).

Within the population quality improvement pillar, several outputs are considered, such as average years of schooling, higher education Gross Enrollment Rate (GER), and stunting prevalence. Among these, stunting prevalence is one of the outputs that must become a working program to be implemented by all provinces, regencies, or cities in Indonesia. The reduction of stunting prevalence has become a nationally emphasized program due to its impact on the quality of the future young generation. The young generation, who will be the nation's future leaders, must have high-quality education and health to face increasing competition in all aspects of life in the future. As the world becomes more interconnected and international boundaries blur, competition in all aspects of life will intensify. To succeed in this competition, the quality of the future young generation must be prepared from an early age. The aim of this community engagement activity is to: 1) analyze the knowledge, attitudes, and practices (Knowledge, Attitude, Practice - KAP) of
young generations in stunting prevention in the village; 2) enhance the role of young generations in stunting prevention in their village through family planning.

II. ACTIVITY BENEFITS

The community engagement activity aims to increase awareness, understanding, and practices regarding stunting prevention in Abang Village, Abang District, Karangasem Regency. By increasing knowledge, particularly among young people in Abang Village, about the phenomenon of stunting, the hope is to reduce stunting prevalence in Karangasem Regency, specifically in Abang Village, through the role of young people in their future family planning. Increased community awareness of good parenting practices will also lead to improvements in cognitive, affective, and psychomotor aspects of children. This ensures that the demographic bonus, as outlined by the government, does not become a demographic disaster, and the goal of achieving a superior human resource by 2045 can be realized by society.

III. ACTIVITY METHODS

The community engagement activity used the following methods: 1) conducted an identification process through a literature review regarding potential stakeholders in reducing stunting in the village; 2) identified and observed the potential for stunted children in Abang Village, Abang District, Karangasem Regency; 3) identified and mapped potential stakeholders in addressing stunting incidents in the village; 4) provided Communication, Information, and Education (CIE) to the community regarding the adverse effects of stunting, the introduction of good parenting practices, and the relationship between demographic bonuses and stunting, particularly concerning young generations. This was presented by an expert in the healthcare field specializing in stunting management; 5) conducted evaluations of the Knowledge, Attitude, and Practice (KAP) related to the CIE conducted on young generations; 6) performed descriptive analysis with the assistance of descriptive statistical tools to analyze the results of the community engagement activity.

IV. RESULT AND DISCUSSION

The first CIE was conducted with young generations or members of Karang Taruna or Sekehe Teruna in Abang Village. After providing CIE, evaluations were conducted through interviews with participants using specific questionnaires. The analysis results are explained as follows.

1) Respondent Characteristics

Several characteristics of respondents were discussed concerning gender, age, education, and employment status. All these respondent characteristic variables are essential in determining their attitudes regarding stunting prevention and treatment in the village.

(1) Gender

The distribution of respondents by gender is shown in Table 1. The data indicates that more female respondents attended the CIE session, meaning that more Sekehe Teruni members were present compared to Sekehe Teruna. The percentage of female respondents was over 50%, while the male respondents were less than 50%, even less than 45%. This is illustrated in Table 1.

Table 1: Distribution of Respondents by Gender

<table>
<thead>
<tr>
<th>Gender</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>44%</td>
</tr>
<tr>
<td>Female</td>
<td>56%</td>
</tr>
</tbody>
</table>

Source: Processed Primary Data, 2023
(2) Age of Respondents

In addition to gender, the respondents were also distributed by age, as presented in Table 2. In general, respondents were below 30 years of age, considering that the participants are young generations (Karang Taruna or Taruni) in Abang Village. Most of the respondents were distributed in the 15-19 age group, which is the youngest age group. The number of young generations in the Karang Taruna organization in Abang Village is 27, which means that the percentage of attendance during the CIE was 100%, indicating very high attendance. Providing CIE to them is crucial to help them understand their roles and contribute to reducing stunting prevalence in the village.

Table 2. Distribution of Respondents by Age

![Age Distribution Chart]

Source: Processed Primary Data, 2023

(3) Respondents Education

When looking at the respondents' education from the data, it is evident that a significant majority, almost three-quarters of the total participants, have a high school education, while the lowest percentage is related to higher education. The data also shows that some are still in junior high school and continuing their education to a higher level. Most of the participants are currently pursuing their education, either in high school or at the university level. This information indicates that the young generation in Abang Village has relatively high education prospects for their future, as they will at least complete their high school education and likely become well-educated individuals, potentially improving their quality of life in the future.

Table 3. Distribution of Respondents by Education

![Education Distribution Chart]

Source: Processed Primary Data, 2023
(4) Respondents Activities

The data also shows that the majority of the Karang Taruna members who attended the CIE session, approximately 78%, are still attending school. This means they are actively pursuing their education to enhance their quality of life. Around 11% of the attendees are employed, while some are either seeking employment or have recently completed their education and are not yet in the job market. While the percentage of those seeking employment or not in the job market is relatively small, most of these young people are primarily focused on their education.

Table 4. Distribution of Respondents by Employment Status

Source: Processed Primary Data, 2023

2) Knowledge, Attitude, and Practices Regarding Stunting in Young Generations in Abang Village

The knowledge, attitude, and practices of younger generations regarding the stunting phenomenon are crucial in the effort to prevent stunting in the future. The provision of CIE to young generations aims to make them understand their role in creating a superior generation in the future through their family planning. This can be achieved through well-rounded family planning encompassing economic, social, physical, and psychological aspects to produce a high-quality generation, both physically and non-physically. The results of the analysis based on the questionnaires filled out during the evaluation are as follows.

(1) Previously heard about stunting

Based on the data analysis, it is apparent that a significant majority of respondents, approximately 70%, had previously heard about the stunting phenomenon, while the remaining 30% had not. This data indicates that a considerable number of young generation participants in the CIE session had not heard about stunting before. This demonstrates the importance and suitability of the CIE activity, which can increase the participants' awareness and knowledge about the stunting phenomenon. For respondents who had heard about stunting, the sources of information varied, including online and offline media. More respondents received information about stunting from online media sources, such as social media.

Various sources of information mentioned were Family Planning Field Extension Workers (PLKB), the internet, TV, Instagram, schools, parents, social media, integrated health posts (posyandu), community gatherings (banjar), socialization, and seminars. The data shows that a significant portion of the respondents obtained information about stunting through online media rather than offline sources, although, in Abang Village, activities carried out at the village level, such as posyandu, PLKB, and community gatherings, provide information about stunting. The subsequent question is whether, after the CIE activity, the knowledge of the participants about stunting increased. Respondents' answers align with expectations, with approximately 96% of CIE participants reporting an increase in their knowledge about stunting. Only about 4% did not experience an increase in their knowledge after the CIE activity. Several factors may have contributed to this, such as lack of focus during the session or difficulty in comprehending the information. It's worth noting that a significant number of participants had recently completed junior high school (SLTP).
Preventing and alleviating stunting is intended to help achieve a superior human resource to support becoming a developed nation with high income, thereby escaping the Middle-Income Trap (MIT). A superior human resource is a prerequisite for increasing productivity and rapidly raising people's incomes. One way the government is striving to create a superior human resource is by preventing and eliminating stunting, ensuring that no children fall under the category of stunted. The intelligence and physical condition of children may deteriorate or not meet their potential standards when they experience stunting, causing them to lag behind their healthy peers. Stunting can affect future productivity and well-being. Biadgilign et al. (2016) argue that poverty and stunting prevalence directly affect economic growth. This demonstrates that a country's economic growth is accompanied by socioeconomic development and increased livelihoods to enhance community well-being.

Data from the KIE results given to young generations in Abang Village indicate that before the KIE activity, around 48% of participants had already heard about superior human resources and Indonesia Maju in 2045, while approximately 52% had not. This shows the significance of the KIE activity, which increased the knowledge of participants who had not previously heard about superior human resources and Indonesia Maju 2045. The data reflects the importance of the KIE in enhancing participants' understanding of the concept of superior human resources and Indonesia Maju in 2045. The next question asked about the level of agreement regarding the concept of superior human resources (SDM unggul), that it should be planned and initiated from within the family. The data shows that all participants agree that to create superior human resources, it must be planned and initiated from within the family. They understand that the family is the starting point if one wants to have superior human resources in the future. With this understanding, it is hoped that when they get married, they will plan their families carefully, determining when they will have children, how many children they desire, and so on, which means they are indeed planning their families thoughtfully. After receiving Knowledge, Information, and Education (KIE) during the evaluation, all participants also agree that the quality of superior human resources within the family must begin with well-planned marriages. With their agreement to this statement, it is expected that they will plan their marriages thoroughly to be prepared in all aspects.

The young generation is motivated to play a role in preventing the stunting phenomenon through family planning in the future. In this evaluation, they were asked whether, after receiving Knowledge, Information, and Education (KIE), they were motivated to contribute to preventing stunting through family planning. In response to this question, all participants answered "yes," indicating that they now understand that family planning is one of the ways to prevent stunting in their future families. From this, it can be concluded that the KIE provided has improved their understanding of the role they can play in preventing stunting. It has also influenced their attitude, making them willing to participate in stunting prevention through family planning. The KIE has effectively transformed their Knowledge, Attitude, and Practice (KAP) related to stunting prevention in their community. This activity aimed to instill in the young generation the importance of their role in stunting prevention through family planning. This involves planning when to get married, when to have children, and how many children to have, all done thoughtfully. A follow-up question was asked to reinforce their role in stunting prevention: "After this KIE, if you get married in the future, will you plan the timing carefully?" Interview data shows that 96 percent answered "yes," indicating that they intend to plan the timing of their marriage carefully.

This implies that they agree with this statement and intend to practice careful timing for their marriage, considering various preparations before getting married. Comprehensive preparations are crucial, including planning for childbirth, as it contributes to better child quality compared to unplanned situations. Continuing, they were asked: "After this KIE, if you get married in the future, will you plan the number of children you will have carefully?" This question is related to planning the number of children to have. It's essential to ensure that the number of children is well-planned according to economic and other capabilities. The research data or participants' answers show that all of them, or 100 percent, answered "yes." They intend
to plan the number of children they will have when they get married in the future. Through the provided education and awareness, they recognize that family planning goes beyond just the number of children; it's also about the quality of children they desire, including their future education. If possible, they aim for their children's education to surpass their own. Additionally, they understand that proper health planning for their children is crucial, which entails budgeting for education and healthcare costs, and this responsibility becomes more challenging with a larger number of children. Given their limited resources, they agree to plan the number of children they will have when they get married in the future.

(4) The Relationship between Stunting Phenomenon and Future Human Resource Quality

Based on various discussions conducted by experts and government programs related to the prevention or treatment of stunting, there is a close relationship between the occurrence of stunting and the quality of Human Resources (HR) in children who suffer from stunting in the future. The growth of children suffering from stunting, both physically and mentally/intellectually, in the future, is lower compared to healthy children. Therefore, the prevention and treatment of stunting are activities of utmost importance to produce excellent HR quality in the future, especially as Indonesia aims to progress to the year 2045. The general public, particularly the younger generation, should be aware of this. To evaluate the Knowledge, Information, and Education (KIE) activities for the younger generation, a question was posed: "Do you know that the stunting phenomenon will decrease the quality of HR in the future?" Based on the data processing, it is evident that about 85% of the respondents answered "yes," while approximately 15% answered "no." This indicates that there are still a considerable number of respondents or participants who do not understand the connection between stunting and the quality of HR in the future. Given that a significant portion of the younger generation involved in KIE activities lacks an understanding of the relationship between stunting and future HR quality, continuous efforts are crucial to enhance their understanding and emphasize their role in stunting prevention to create excellent HR for the future.

Bata et al. (2017) argued that stunting is correlated with various long-term consequences in life, including reduced cognitive development and higher morbidity and mortality rates, making stunting a significant contributor to poverty. To instill more confidence in their knowledge after receiving KIE on the relationship between stunting and the quality of children in the future, further questions were presented. One of these questions was: "Do you agree that the stunting phenomenon should be addressed/reduced/eliminated to improve HR quality in the future?" Respondents or KIE participants, in general, answered "agree" or "strongly agree" with this statement. Only about 4% indicated "somewhat agree." This implies that 96% of them understand and acknowledge the link between the stunting phenomenon and the resulting impact on HR quality in the future. The younger generation plays a crucial role in development and in creating a competitive generation in the future. As previous research has highlighted, stunting is a health issue that takes priority in creating high-quality HR in Indonesia (Lawaceng & Rahayu, 2020). Studies by Casale et al. (2018) and Grantham-McGregor et al. (2007) suggest that stunting has long-term effects on individuals and society, including diminished cognitive and physical development, decreased productivity, poor health, and an increased risk of degenerative diseases like diabetes. Therefore, it is highly expected that the younger generation comprehends the significance of stunting prevention and actively participates in averting stunting occurrences in the future.

(5) The Role of the Younger Generation in Stunting Prevention

The younger generation is of great significance for the future as they represent the successors of their generation. Hence, the role of the younger generation is highly anticipated in their efforts to produce high-quality successors through their contribution to building their own families. To address this, a question was posed to evaluate this notion: "Do you agree that the younger generation plays a crucial role in reducing/eliminating the stunting phenomenon in the future?" This question was presented to participants, the younger generation, during Knowledge, Information, and Education (KIE) activities. The results indicated that all participants agreed or strongly agreed, with around 96%, while approximately 4% somewhat agreed. This implies that all participants understand the vital role of the younger generation in reducing or preventing stunting, especially in the families they will form. The younger generation's role extends beyond their immediate families and can also affect other families, particularly as they become the
guardians of stunted children. The efforts to prevent stunting begin with the younger generation, or youth, even before marriage, and continue with the roles of prospective brides and grooms, and ultimately, the roles of husbands and wives in planning their families. Participants provided several reasons to support their agreement regarding the younger generation's crucial role in stunting prevention. Many emphasized that the younger generation has a significant role in determining the quality of a nation. Additional reasons included the younger generation's ability to reduce the occurrence of stunting in society, the importance of planning children well when the younger generation decides to marry, their influence on future generations, their capability to generate high-quality successors, their role in creating a new generation, and their responsibility in giving birth to the future generation. In summary, their agreement stems from the understanding that the younger generation, as the future parents, can safeguard the quality of the children they bring into the world, ultimately preventing or reducing stunting through their active involvement.

To further ensure their understanding and planning for the future to support stunting prevention, additional questions were presented. For instance, participants were asked: "What can you do to contribute to preventing or reducing the stunting phenomenon in this village?" This question is crucial in assessing the knowledge, attitude, and practices of the younger generation related to stunting prevention. A predominant response provided by most participants was that they would plan their marriages and pregnancies meticulously, avoiding early marriages and ensuring maturity in terms of age and economic stability before entering into matrimony. As a result, almost all respondents stated they would carefully plan their marriages and pregnancies and refrain from marrying at a young age. One particularly interesting response was their commitment to disseminate knowledge about the stunting phenomenon to their families. The expected change in behavior is that the younger generation is willing to share their knowledge about stunting prevention with the wider community, particularly with pregnant and breastfeeding mothers and families with children under two years of age. Research conducted by Rachmah has shown that providing nutritional education to mothers has a significant impact on increasing their knowledge about stunting prevention during the golden period (Rachmah et al., 2020). In conclusion, the younger generation feels responsible for preventing the stunting phenomenon.

The subsequent question addressed their knowledge of the impact of early marriage on the stunting phenomenon. The question was as follows: "Do you know that early marriage is one of the causes of children being born with stunting?" The results of the analysis revealed that a considerable number of participants answered that they did not know. This indicates that they lack awareness that early marriage is one of the causes of stunting, where those who marry early may not be physically, psychologically, socially, or economically prepared for married life. Based on research by Maudina (2019), early marriage has health consequences, such as immature reproduction leading to miscarriages during pregnancy, premature births, infant mortality, and difficulties in conceiving due to high blood pressure. The analysis results showed that approximately 89% affirmed that early marriage is one of the causes of stunting in the community, while around 11% were unaware of this fact. This percentage suggests that there is still a significant number of participants who lack knowledge of this aspect, with more than 10% being uninformed. In a cross-analysis related to education, the participants who were uninformed about early marriage being a cause of stunting were predominantly those with a junior high school education (SLTP). This suggests that their lack of knowledge might be attributed to their educational level, as they are still in junior high school and may not have had significant exposure to this topic.

V. CONCLUSION AND SUGGESTIONS

The following conclusions can be drawn from the discussions and analysis conducted.

1) The participants in the socialization activities were predominantly females, with a majority of them belonging to the Karang Taruna youth organization from Abang Village. Their ages ranged from 15 to 29 years, and most of them had completed their secondary education (SLTA). Furthermore, a significant portion of the participants was still attending school.

2) Most of the participants had heard about the stunting phenomenon before, with information coming from various sources, including online and offline media and previous meetings or socialization events.

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Following the socialization activities, it was observed that the participants' knowledge about stunting increased, with nearly all participants demonstrating improved understanding.

3) Prior to the socialization, only a small fraction of the participants had heard about the concept of "SDM unggul" (excellent human resources) and the goal of "Indonesia Maju" (Advancing Indonesia) by 2045. However, after the socialization activities, all participants acknowledged and understood the importance of cultivating excellent human resources, beginning within the family. The community engagement activities effectively enhanced the participants' knowledge and comprehension of the interrelation between stunting and the creation of excellent human resources for the future.

4) The participants expressed motivation to participate in stunting prevention within their future families. They understood that family planning could be one of the approaches for preventing stunting. The Knowledge, Information, and Education (KIE) activities during the socialization were successful in changing their Knowledge, Attitude, and Practices (KAP) regarding stunting prevention measures.

5) Following the socialization, most participants comprehended that stunting incidents could impact the future quality of human resources. However, there were still some who did not fully grasp this concept. In general, participants understood that addressing stunting is a crucial step in enhancing the quality of the younger generation in the future.

Based on the analysis and the outcomes achieved regarding the Knowledge, Attitude, and Practices (KAP) of the participants in the socialization activities, similar activities should be conducted in other villages, particularly in areas with high stunting prevalence. Knowledge, Information, and Education (KIE) delivered by competent speakers can expedite the improvement of participants' KAP, making them more willing to participate in efforts to reduce stunting in their communities.

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